

**CLAIM AMENDMENTS**

**Please amend claims 1, 2, 4, 6, 7, 9, 11-13, 16, 18 and 19; cancel claim 20; and add new claim 21 as follows:**

1. (Currently Amended) A latch diagnostic method, comprising the steps of:  
generating diagnostic data associated with a latch, in response to automatically analyzing said latch; wherein said diagnostic data comprises latch operational and/or functional information for debugging of said latch;  
graphically displaying said diagnostic data within a display area of a graphical user interface for permitting a user to initiate particular latch operational and debugging functionalities; and  
communicating latch operational and functionality feedback information to said latch, in response to user input provided to said graphical user interface.
2. (Currently Amended) The method of claim 1 further comprising the step of:  
~~automatically analyzing said latch in response to user input provided through said graphical user interface.~~  
Initiating a latch debugging operation in response to a user input provided to said graphical interface; and  
communicating said latch debugging operation between said graphical user interface and said latch.
3. (Original) The method of claim 1 further comprising the step of:  
automatically analyzing said latch during latch operations thereof.
4. (Currently Amended) The method of claim 2 wherein said diagnostic data comprises internal electrical functionality and status data.~~the step of graphically displaying said diagnostic data within a display area of a graphical user interface, further comprises the step of:~~

~~displaying said diagnostic within said display area, wherein said diagnostic data comprises latch functionality and operational information.~~

5. (Original) The method of claim 1 further comprising the step of:

automatically modifying a functionality and an operation of said latch, in response to communicating latch operational and functionality feedback information to said latch.

6. (Currently Amended) A latch diagnostic system, comprising:

diagnostic data associated with a latch, wherein said diagnostic data comprises operational and/or functional information for debugging said latch and wherein said diagnostic data is generated in response to automatically analyzing said latch;

a graphical user interface for graphically displaying said diagnostic data within a display area thereof for permitting a user to initiate particular latch operational and debugging functionalities; and

a communications link between said graphical user interface and said latch over which latch operational and functionality feedback information is communicated to said latch, in response to user input provided to said graphical user interface.

7. (Currently Amended) The system of claim 6 further comprising latch debugging operation data, said latch debugging operation data being communicated over said communications link between said graphical user interface and said latch in response to said graphical user interface being activated to initiate a latch debugging operation.

~~wherein said latch is automatically analyzed in response to user input provided through said graphical user interface-~~

8. (Original) The system of claim 6 wherein said latch is automatically analyzed during latch operations thereof.

9. (Currently Amended) The system of claim 6 wherein said diagnostic data comprises ~~latch functionality and operational information~~, comprises internal electrical functionality and status data.

10. (Original) The system of claim 6 wherein a functionality and an operation of said latch are automatically modified, in response to communicating latch operational and functionality feedback information to said latch over said communications link.

11. (Currently Amended) The system of claim 6 wherein ~~said graphical user interface is displayable within a display screen associated with a data processing system~~, said diagnostic data comprises motor current, positional feedback and/or pulse width modulation information.

12. (Currently Amended) The system of claim 11 wherein said latch is automatically analyzed in response to said graphical user interface receiving a user input, ~~communications link comprises a wireless communications link between said data processing system and said latch~~.

13. (Currently Amended) A program product residing in a memory of a data-processing system for diagnosing a latch, comprising:

instruction means residing in a data-processing system for generating diagnostic data associated with a latch, in response to automatically analyzing said latch; wherein said diagnostic data comprises latch operational and/or functional information for debugging of said latch;

instruction means residing in a data-processing system for providing a graphical user interface for graphically displaying said diagnostic data within a display area thereof for permitting a user to initiate particular latch operational and debugging functionalities; and

instruction means residing in a data-processing system for communicating latch operational and functionality feedback information from said graphical user interface to said latch, in response to user input provided through said graphical user interface.

14. (Original) The program product of claim 13 wherein said latch is automatically analyzed in response to user input provided through said graphical user interface.

15. (Original) The program product of claim 13 wherein said latch is automatically analyzed during latch operations thereof.

16. (Currently Amended) The program product of claim 13 wherein said diagnostic data comprises ~~latch functionality and operational information~~ latch internal electrical functionality and status data.

17. (Original) The program product of claim 13 further comprising instruction means residing in a data-processing system for automatically modifying a functionality and an operation of said latch, in response to communicating latch operational and functionality feedback information to said latch over said communications link.

18. (Currently Amended) The program product of claim 13, further comprising instruction means residing in a data-processing system for initiating a latch debugging operation in response to activating said graphical user interface and for communicating said latch debugging operation between said graphical user interface and said latch ~~each of said instruction means further comprises signal bearing media~~.

19. (Currently Amended) The program product of claim 13, wherein said instructions means further comprises signal bearing media ~~further comprises recordable media.~~

20. (Cancelled)

21. (New) The method of claim 1, wherein said diagnostic data comprises motor current, positional feedback and/or pulse width modulation information.